REMARKS AND DISCUSSION

Upon entry of the present amendment, claims 1-6 and 8-17 are pending in the application, of which claims 1, 5, 6, 8, 12, 14 and 15 are independent.

The applicant gratefully acknowledges the Examiner's helpful remarks during the personal interview held with the applicant's representative on August 11, 2005. During the interview, the references Hasegawa et al. (US Pub. No. 2003/00479903) and Hanawa et al. (US 6,824,153) were discussed with respect to the claimed invention. Because it was agreed that Hanawa discloses plural channels (Figs. 8 and 9), the applicant's representative indicated that a supplemental amendment would be submitted to promote the prosecution of the application.

It is contended that by the present amendment, all bases of rejection set forth in the Office Action have been traversed and overcome. Accordingly, reconsideration and withdrawal of the rejection in the last Office Action is respectfully requested.

Claim Rejection under 35 USC 102

At item 3 of the Office Action, the Examiner rejected claims 8-11 and 13 under 35 USC 102(e) as being anticipated by Hasegawa et al (US Patent Application Publication 2003/0047903 A1).

As regards claims 8 and 9, the Examiner states that Hasegawa et al disclose a motorcycle including a frame 3, head pipe 13 with integral flange 3c extending rearwardly, a steering column 14 attached to the head pipe 13, and a rotary steering damper having a damper housing 17 having a chamber 26 and a plurality of fluid flow connections (one on each side of the vane 30), damper shaft 23, a vane 30 attached to the shaft 23, a hydraulic pressure control valve 31, and actuator 31/32 connected to the control valve and disposed below the housing extension.

Applicant's Response

The applicant respectfully disagrees with the rejection of claim 8 since Hasegawa does not disclose all the claimed features, and thus does not anticipate the applicant's invention.

Hasegawa discloses a hydraulic pressure control valve 31 disposed rearwardly of the damper housing (paragraph 39, Figs 2, 3, and 5), and thus does not disclose a hydraulic pressure control valve disposed in said damper housing as recited in claim 8. Hasegawa further discloses an alternative arrangement (paragraph 54) in which the control valve 31 and control device 32 are provided on the vehicle body front side with the steering shaft therebetween. However, of itself, this shift in relative position does not imply that the control valve 31 is moved to a position inside the housing. Thus, Hasegawa does not anticipate the invention claimed in claim 8.

Moreover, Hasegawa discloses an actuator extending from a rear portion of the housing such that an upper surface of the actuator is generally coplanar with an upper surface of the housing (Figs. 2 and 5), and thus does not disclose an secured to a lower surface of the housing extension, the lower surface extending in a direction normal to an axis of the damper shaft, as recited in claim 8. Although the Examiner refers to Hasegawa's Fig. 5 to show that a topmost portion of the extension is located above the actuator due to an inclination of the damper housing, the applicant respectfully submits that the actuator 32 is not secured to a lower surface of the housing extension, the lower surface extending in a direction normal to an axis of the damper shaft. The applicant's interpretation of the position of the actuator is substantiated by Hasegawa's written disclosure, which states that the actuator extends from a rear portion of the housing (paragraph 39), and does not suggest or imply the arrangement disclosed and claimed by the applicant.

However, to further promote the prosecution of this application, the applicant has amended claim 8 here to recite that the actuator is secured to a lower surface of the housing

extension, and that the lower surface extends in a direction normal to an axis of the damper shaft. Because the device disclosed by Hasegawa does not disclose or suggest this feature, claim 8 avoids anticipation by Hasegawa.

Based on the foregoing, the rejection of claim 8 under 35 USC 102(e) as being anticipated by Hasegawa et al. is believed to be overcome. Moreover, the rejections of claims 9-11 and 13 are also overcome as a result of the dependency of these claims on claim 8. It is respectfully requested that such rejection be reconsidered and withdrawn.

At item 4 of the Office Action, the Examiner rejected claims 6, 7 and 18 under 35 USC 102(e) as being anticipated by Hanawa et al. (US Patent 6,824,153). The Examiner states that Hanawa discloses a steering damper including a pressure control valve 20 in an oil path, the pressure control valve, controlled to vary the attenuating force upon operation of the steering system, comprising an electric pressure control valve 20 in an oil path 15, and a mechanical pressure control valve 30 provided in a bypass oil path parallel to the electric pressure control valve, as claimed. As regards claim 7 and 18, the Examiner states that Hanawa discloses that the opening pressure of the mechanical valve 30 is lower than the opening pressure of the electric valve.

Applicant's Response

The applicant has amended claim 6 in the previously filed amendment A, to include the features illustrated in Figure 14. Specifically, claim 6 recites that a maximum opening pressure of said electric pressure control valve is set so that a lower limit value to a dispersion thereof is a) higher than a lower limit value to a dispersion of an opening pressure of said mechanical pressure control valve, and b) lower than an upper limit value to a dispersion of an opening pressure of

said mechanical pressure control valve. These features are fully supported in paragraph 78 of the specification, and are shown in Fig. 14. Since part a) of this amendment encompasses the features originally recited in dependent claim 7, claim 7 is canceled herein. Since part b) of this amendment encompasses the features originally recited in dependent claim 18, claim 18 is canceled herein.

Although the applicant agrees that Hanawa discloses a damper in which the opening pressure of the mechanical valve 30 is lower than the opening pressure of the electric valve 20, the applicant submits that Hanawa is silent as to the upper limit value to a dispersion of an opening pressure of the mechanical pressure control valve 30.

Based on the foregoing, the rejection of claim 6 under 35 USC 102(e) as being anticipated by Hanawa et al. is believed to be overcome since Hanawa et al do not disclose that a maximum opening pressure of said electric pressure control valve is set so that a lower limit value to a dispersion thereof is both higher than a lower limit value to a dispersion of an opening pressure of the mechanical pressure control valve, and lower than an upper limit value to a dispersion of an opening pressure of the mechanical pressure control valve. It is respectfully requested that such rejection be reconsidered and withdrawn.

Claim Rejection under 35 USC 103

At item 7 of the Office Action, the Examiner rejected claims 1-4, 8-11, 13, 14, 16 and 17 under 35 USC 103(a) as being unpatentable over Hanawa et al. In the rejection, the Examiner stated that Hanawa teaches the limitations recited in these claims except a damper housing disposed above a top bridge and an actuator disposed below the housing. The Examiner considers it to be obvious to have as a matter of design choice to have simply disposed the

housing above the top bridge of the vehicle and the actuator below the housing, thus allowing for use on various vehicles and making the apparatus more compact. The Examiner also contends that shifting placement of the recited elements does not effect their operation and the parts as rearranged by Hanawa et al would function equally well having been repositioned, and that the simple rearrangement of parts has been held to be unpatentable (***In re Japikse***, 181 F.2d 1019, 86 USPQ 70 (CCPA 1950)).

The applicant respectfully disagrees with this rejection, since there is no suggestion in Hanawa et al for such a modification. In regard to the position of the damper housing with respect to the top housing, Hanawa discloses the damper housing as disposed beneath the head pipe, and makes no suggestion for any other position. In regard to the position of the actuator (ie, solenoid 21 for damping valve 20), with reference to Figs. 1 and 6, Hanawa teaches an arrangement in which the steering device 10 extends generally horizontally, perpendicular to the shafts 4, 11, and in which the solenoid 21 extends horizontally from a side of the steering damper 10. With reference to Fig. 10, Hanawa appears to disclose an alternative location for the actuator, in which it extends from an upper surface of the damper housing. In particular, Hanawa does not disclose a damper housing secured to an upper bridge, and an actuator disposed on an underside of the damper housing.

As a matter of case law, rejections based on 35 USC 103 must rest on a factual basis, with the facts being interpreted without hindsight reconstruction of the invention from the prior art. The Examiner has the initial duty of supplying the factual basis for the rejection. The Examiner may not, because of doubt that the invention is patentable, resort to speculation, unfounded assumption, or hindsight reconstruction to supply deficiencies in the factual basis (see ***In re Warner***, 379 F.2d 1011, 154 USPQ 173 (CCPA 1967)).

The Standard for Obviousness under Federal Circuit Law

Applicant respectfully wishes to call the Examiner's attention to some relevant cases of the U.S. Court of Appeals for the Federal Circuit (CAFC). The CAFC was established in 1982 to bring national standards, and a certain level of conformity and continuity to Federal patent case law. Decisions of the Federal Circuit are relevant and helpful in giving guidance to patent practitioners, as well as to the personnel of the U.S. Patent and Trademark Office. The CAFC has stated that:

> In order to determine obviousness as a legal matter, four factual inquiries must be made concerning: 1) the scope and content of the prior art; 2) the level of ordinary skill in the art; 3) the differences between the claimed invention and the prior art; and 4) secondary considerations of nonobviousness, which in case law is often said to include commercial success, long-felt but unresolved need, failure of others, copying, and unexpected results. ***Graham v. John Deere Co.***, 383 U.S. 1, 17-18, 148 USPQ 459, 467 (1966); ***Miles Labs., Inc. v. Shandon, Inc.***, 997 F.2d 870, 877, 27 USPQ2d 1123, 1128 (Fed. Cir. 1993).

The U.S. Court of Appeals for the Federal Circuit has said that the use of hindsight, in evaluating patentability, is improper, ***In re Werner Kotzab***, 55 U.S.P.Q. 2d 1313 (CAFC 2000); ***Gore v. Garlock***, 220 U.S.P.Q. 303 (CAFC 1983).

Specifically, in ***Kotzab***, supra, the CAFC stated:

> **A critical step in analyzing the patentability of claims pursuant to section 103(a) is casting the mind back to the time of invention, to consider the thinking of one of ordinary skill in the art, guided only by the prior art references and the then-accepted wisdom in the field. See *Dembiczak*, 175 F.3d at 999, 50 USPQ2d at 1617. Close adherence to this methodology is especially important in cases where the very ease with which the invention can be understood may prompt one "to fall victim to the insidious effect of a**

hindsight syndrome, wherein that which only the invention taught is used against its teacher." Id.

Most, if not all inventions arise from a combination of old elements. See *In re Rouffet*, 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1457 (Fed. Cir. 1998). Thus, every element of a claimed invention may often be found in the prior art. See id. However, identification in the prior art of each individual part claimed is insufficient to defeat patentability of the whole claimed invention. See id. Rather, to establish obviousness based on a combination of the elements disclosed in the prior art, there must be some motivation, suggestion or teaching of the desirability of making the specific combination that was made by the applicant (citations omitted).

The applicant submits that the above-quoted language of the Court of Appeals for the Federal Circuit has relevance to prosecution of the present application in which the rejection appears to be based on improper hindsight, and that the Examiner's preliminary position in the Office Action should be reconsidered and withdrawn.

At item 8 of the Office Action, the Examiner rejected claims 1-4, 6-11, 13, 14, 16-18 under 35 USC 103(a) as being unpatentable over Sweeney Jr. (US 2,814,362). The Examiner states that Sweeney Jr. discloses a steering damper for a vehicle having a pressure control valve 57 interposed in an oil path formed in the damper housing, the valve controlled to vary the attenuating force upon operation of the damper, the apparatus comprising a damper housing having an oil chamber I with a plurality of flow channels, a damper shaft, vane, hydraulic pressure control valve 57, mechanical pressure control valve 58/59 provided in a bypass oil path provided in parallel to the pressure control valve 57, the housing and shaft capable of being adapted for connection to a vehicle body and steering system, with the housing capable of being adapted for connection above a top bridge as necessary. The Examiner states that Sweeney fails to teach the pressure control valve being an electric solenoid, as well as being disposed in its

entirety below the housing extension. The Examiner further states that automating a manual activity that accomplishes the same result is not sufficient to distinguish over the prior art, and a simple arrangement of parts is held by the courts to be unpatentable, thus it would be obvious to simply replace the manual valve of Sweeney Jr. with an automatic or electrically controlled valve, allowing for automatic or remote control of the valve , and to have disposed the solenoid valve actuator in its entirety below the housing of Sweeney Jr. thus making the apparatus more compact.

Upon review of Sweeney Jr., the applicant finds that Sweeney Jr. discloses a vibration damping apparatus for an aircraft which includes a pair of vancs16, 17 disposed on opposed sides of a rotor hub 15 within fluid chambers I, II. A plurality of passages 51-54, 60-63 extend between the fluid chambers, and fluid flow is restricted within the passages by means manual adjustment of a needle valve 57, which is threadedly secured to the housing. Relief valves 58, 59 are provide which open when the fluid values exceed a given maximum value. The end portion 20 of rotor hub 15 is secured to a shaft or other element subjected to small amplitude, high frequency ocillatory vibrations.

The applicant respectfully disagrees with this rejection since there is no suggestion in Sweeney Jr. for such modifications. The applicant refers the Examiner to the discussion of case law in this regard found above with respect to the 103 rejection of these claims in view of Hanawa et al, incorporated by reference herein.

With respect to the modification in which the manual valve of Sweeney Jr. is replaced with an electrically controlled valve (ie, the linear solenoid disclosed by the applicant), the applicant strongly disagrees that such a modification is obvious. Sweeney Jr. discloses a control valve consisting of a needle valve, and thus does not require a modification to obtain a control

valve. Moreover, the control valve 57 disclosed by Sweeney Jr. is positionally adjusted with respect to the housing by rotating the valve within the mounting threads thereof. Thus, it would not be obvious to provide a linear solenoid actuator for such control valve, since the adjustment of the control valve 57 is rotational.

With respect to the modification which would dispose a solenoid valve actuator in its entirety below the housing of Sweeney Jr, the applicant disagrees that such a modification is obvious since adding an actuator and positioning the actuator below the housing would increase the overall volume of space occupied by the vibration damping apparatus of Sweeney Jr, rather than making it more compact as presented by the Examiner. Even if it were obvious to add an actuator (which the applicant does not concede), positioning such an actuator below the apparatus is not suggested by Sweeney Jr, and thus such positioning can only be as a result of the use of hindsight on the part of the Examiner.

Based on the foregoing, the rejection of claims 1-4, 6-11, 13, 14, 16-18 under 35 USC 102(e) as being unpatentable over Sweeney Jr. is believed to be overcome. It is respectfully requested that such rejection be reconsidered and withdrawn.

Allowable Subject Matter

At item 9 of the Office Action, the Examiner indicated that claims 5, 12, 15, although objected to as being dependent upon a rejected base claim, would be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claims. Claims 5, 12, and 15 have previously been placed in independent form in Applicant's Amendment A, as suggested by the Examiner.

Conclusion

For all of the above mentioned reasons, applicant requests reconsideration and

withdrawal of the rejection of record, and allowance of the pending claims.

Applicant respectfully submits that the above amendments are fully supported by the original disclosure, including the drawings and claims, no new matter is introduced by the above amendments. The application is now believed to be in condition for allowance, and a notice to this effect is earnestly solicited.

If the Examiner is not fully convinced of the allowability all of the claims now in the application, applicant respectfully requests that the Examiner telephone applicant's undersigned representative to expeditiously resolve prosecution of the application.

Favorable reconsideration is respectfully requested.

Respectfully submitted,

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CERTIFICATE OF TRANSMISSION

I hereby certify that this correspondence is being sent via facsimile transmission to the US Patent & Trademark Office on October 6, 2005.

WB/kmm